

1 What is claimed is:

2 1. A method for executing tools in a service control manager (SCM) module, comprising:

3 receiving a request from a user to run a tool on one or more nodes, wherein the request includes

4 task information;

5 retrieving tool definition, node definition and user definition from a domain manager;

6 creating a runnable tool based on the task information and the tool definition;

7 passing the runnable tool to a distributed task facility (DTF), wherein the DTF issues a task

8 identifier based on the runnable tool; and

9 passing the runnable tool to agents associated with the nodes, wherein the agents execute the

10 runnable tool and return task results to the DTF.

11 2. The method of claim 1, further comprising validating the task information received from the

12 user.

13 3. The method of claim 1, further comprising checking user authorization to run the tool on all of

14 the nodes requested.

15 4. The method of claim 1, wherein the receiving step includes receiving the request through a

16 client, wherein the client is a program that interacts with the user and displays information on computer

17 systems that reside on the nodes.

18 5. The method of claim 4, wherein the receiving step includes receiving the request from a

19 graphical user interface client.

20 6. The method of claim 4, wherein the receiving step includes receiving the request from a

21 command line interface client for executing tasks.

22 7. The method of claim 1, further comprising:

23 collecting the task results from the agents; and

24 returning the task results to the user.

25 8. The method of claim 7, wherein the collecting step includes collecting failure reports from the

26 agents.

- 1 9. The method of claim 7, wherein the collecting step includes updating individual target statuses.
- 2 10. The method of claim 7, wherein the collecting step includes collecting target outputs that contain
3 an exit code, a standard output, or a standard error output that resulted from running the commands
4 associated with the tool on the nodes.
- 5 11. The method of claim 7, wherein the collecting step includes updating an overall task status.
- 6 12. The method of claim 7, wherein the returning step includes displaying the task results on a
7 computer screen.
- 8 13. The method of claim 7, wherein the returning step includes printing the task results on a printer.
- 9 14. The method of claim 7, wherein the returning step includes writing the task results to a file or
10 to a directory, wherein the directory contains one file for each node requested and the results for each
11 node are written to the corresponding file in the directory.
- 12 15. A service control manager (SCM) module for the execution of a tool, comprising:
13 clients that are programs interacting with users and displaying information on the computer
14 systems that reside on nodes that are managed servers in the SCM module;
15 a domain manager that manages and stores tool definitions, node definitions, role definitions,
16 authorization definitions, and user definitions, wherein the clients creates a runnable tool based on
17 information returned from the domain manager;
18 a distributed task facility (DTF) that receives the runnable tool from the clients, and issues a task
19 identifier based on the runnable tool; and
20 agents associated with the nodes that receive the runnable tool from the DTF, and execute the
21 tool on the nodes.
- 22 16. The SCM module of claim 15, wherein the DTF receives the runnable tool from the clients
23 through task manager interfaces, wherein the task manager interfaces are called by the clients to
24 perform a task, to cancel or kill a task, or to monitor task status operations.
- 25 17. The SCM module of claim 15, wherein the agents receive the runnable tool from the DTF
26 through target liaison interfaces, wherein the target liaison interfaces are used by the agents to
27 communicate with the DTF in order to process assigned tasks.

1 18. A method for executing tools in a service control manager (SCM) module, comprising:
2 receiving a request from a user to run a tool on one or more nodes, wherein the request includes
3 task information;
4 creating a runnable tool based on the task information and tool definition provided by a domain
5 manager;
6 passing the runnable tool to a distributed task facility (DTF);
7 passing the runnable tool to agents associated with the nodes;
8 running the tool on the nodes by the agents; and
9 returning task results or failure reports to the DTF.

10 19. The method of claim 18, wherein the receiving step includes receiving the request through a
11 client, wherein the client is a program that interacts with the user and displays information on computer
12 systems that reside on the nodes.

13 20. The method of claim 18, wherein the returning step includes returning target outputs that contain
14 an exit code, a standard output, or a standard error output that resulted from running the commands
15 associated with the tool on the nodes.